Atty. Dkt. No. 080542-0157 Appl. No. 10/081,208

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-10. (Cancelled)

- 11. (Withdrawn) A denitration method which comprises bringing exhaust gas containing nitrogen oxides and not more than 80% of water as water vapor, and NH₃ gas having the same concentration as the nitrogen oxides into contact with a heat-treated active carbon, said heat-treated active carbon is prepared by heat-treating an active carbon at 600° to 1,200 °C in a non-oxidizing atmosphere so as to remove oxygen-containing functional groups present at the surfaces thereof and thereby reduce the atomic surface oxygen/surface carbon ratio to 0.05 or less, at a temperature ranging from ordinary temperature to 150°C, in order to reduce the nitrogen oxides selectively and thereby decompose them to nitrogen and water.
- 12. (Withdrawn) A denitration method as claimed in claim 11 wherein a higher degree of denitration of nitrogen oxides having a low temperature and a low concentration is performed at the outlet of an exhaust gas treating apparatus or the outlet of a boiler.

13-20. (Cancelled)

- 21. (Withdrawn) A denitration method which comprises bringing exhaust gas containing nitrogen oxides and not more than 80% of water as water vapor, and NH₃ gas having the same concentration as the nitrogen oxides into contact with a heat-treated active carbon, said heat-treated active carbon is prepared by heat-treating an active carbon at 600° to 1,200 °C in a non-oxidizing atmosphere and activating the surfaces thereof with sulfuric acid or nitric acid to impart oxidizing oxygen-containing functional groups thereto, at a temperature ranging from ordinary temperature to 150°C, in order to reduce the nitrogen oxides selectively and thereby decompose them to nitrogen and water.
- 22. (Withdrawn) A denitration method as claimed in claim 21 wherein a higher degree of denitration of nitrogen oxides having a low temperature and a low concentration is performed at the outlet of an exhaust gas treating apparatus or the outlet of a boiler.

- 23. (Currently Amended) A denitration system comprising
- (A) a first reactor that has an inlet and an outlet and that is packed with a heat treated active carbon having an atomic surface oxygen/ surface carbon ratio of 0.05 or less;
- (B) a second reactor that has an inlet and an outlet and that is packed with said heat treated active carbon, wherein the outlet of the first reactor is connected to the inlet of the second reactor;
- (C) an ammonia supply line that is connected means for supplying ammonia to the inlet of said first reactor;
- (D) a system inlet that is connected means for supplying an exhaust gas to the inlet of said first reactor; and
 - (E) a system outlet that is connected to the outlet of the second reactor.
- 24. (Previously Presented) The denitration system of claim 23, wherein the heat treated active carbon is a heat treated carbon fiber.
- 25. (Previously Presented) A denitration system comprising
- (A) a first reactor that has an inlet and an outlet and that is packed with a heat treated active carbon having an atomic surface oxygen/ surface carbon ratio of 0.05 or less;
- (B) a second reactor that has an inlet and an outlet and that is packed with said heat treated active carbon;
- (C) an ammonia supply line that is connected to the inlet of the first reactor through a first valve and to the inlet of the second reactor through a second valve;
- (D) a system inlet that is connected to the inlet of the first reactor through the first valve and to the inlet of the second reactor through the second valve; and
- (E) an outlet of the denitration system, wherein
- (i) the outlet of the first reactor is connected to the inlet of the second reactor through the third valve and to the system outlet through the fourth valve,
- (ii) the outlet of the second reactor is connected to the system outlet through the fifth valve and the inlet of the first reactor through the sixth valve, and
 - (iii) if the first, third and fifth valves are open, the second, fourth and sixth valves are

closed, and if the first, third and fifth valves are closed, the second, fourth and sixth valves are open.

- 26. (Previously Presented) The denitration system of claim 25, wherein the heat treated active carbon is a heat treated carbon fiber.
- 27. (Currently Amended) A denitration system comprising
- (A) a denitrator that has an inlet and an outlet and that is packed with a heat treated active carbon having an atomic surface oxygen/ surface carbon ratio of 0.05 or less;
 - (B) a first NH₃ adsorber that has an inlet and an outlet;
 - (C) a second first-NH₃ adsorber that has an inlet and an outlet;
 - (D) a first ammonia supply line;
 - (E) a second ammonia supply line;
 - (F) a system inlet; and
 - (G) a system outlet,

wherein

- (i) the system inlet is connected to the inlet of the first adsorber via a first valve and to the outlet of the second adsorber through the second valve;
- (ii) the first ammonia supply line is connected to both the inlet of the denitrator and the outlet of the first adsorber through a third valve;
- (iii) the second ammonia supply line is connected to both the outlet of the denitrator and the inlet of the second adsorber through a fourth valve;
 - (iv) the inlet of the denitrator is connected to the outlet of the first adsorber;
 - (v) the outlet of the denitrator is connected to the inlet of the second adsorber;
- (vi) the outlet of the second adsorber is connected to the system outlet through a fifth valve;
- (vii) the inlet of the first adsorber is connect to the system outlet through a sixth valve; and
- (viii) if the first, third and fifth valves are open, the second, fourth and sixth valves are closed, and if the first, third and fifth valves are closed, the second, fourth and sixth valves are open.

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28. (Previously Presented) The denitration system of claim 27, wherein the heat-treated active carbon is a heat treated carbon fiber.